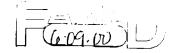
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R<sup>1</sup> is OH, O(CH<sub>2</sub>)<sub>1-2</sub>OH, OCH<sub>2</sub>CO<sub>2</sub>H, CO<sub>2</sub>H, O-Z-C(O)NHCHR/\*(CH<sub>2</sub>)<sub>0-5</sub>R<sup>17</sup> O-Z-C(O)NH(CH<sub>2</sub>)<sub>1-6</sub>R<sup>17</sup> or [OCH<sub>2</sub>-4-Phe-C(O)NHCHR<sub>16</sub>(CH<sub>2</sub>)<sub>0-5</sub>R<sup>17</sup>] OCH<sub>2</sub>-4-Phe-C(O)NH(CH<sub>2</sub>)<sub>1-6</sub>R<sup>17</sup>;

 $\mathbb{R}^2$  is H or lower alkyl;

R<sup>3</sup> is H, alkyl, aryl, or arylalkyl;

R<sup>4</sup> and R<sup>5</sup> are each independently H, lower alkyl, or substituted lower alkyl where the substituents are 1-3 alkoxy, aryl, substituted aryl, carboalkoxy, carboxamido.

 $-(CH_2)_{1-4}-N$ di-loweralkylamido |, or

R<sup>4</sup> and R<sup>5</sup> taken together are  $-(CH_2)_n$ -,  $-(CH_2)_2$ -O- $(CH_2)_2$ -,  $-CH_2$ -O- $(CH_2)_3$ -,  $-(CH_2)_2$ -NR<sup>8</sup>- $(CH_2)_2$ -,  $-CH_2$ -NR<sup>8</sup>- $(CH_2)_m$ -,  $-(CH_2)_2$ XH(NHR<sup>8</sup>) $(CH_2)_2$ -  $-(CH_2)_2$ CH(NHR<sup>8</sup>) $(CH_3)_2$ -, or  $-(CH_2)_2$ CH(N-loweralkyl) $-(CH_2)_2$ CHCH<sub>2</sub>-;

one of  $R^6$  and  $R^7$  is H and the other is H, OH,  $\sqrt{r} N(CH_2)_{1-6}R^{14}R^{15}$ ; or

 $R^6$  and  $R^7$  taken together are  $R^6$ ,  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^8$ ,  $R^8$ , with the proviso that when  $R^1$  is -OH and  $R^2$  is -H,  $R^6$  and  $R^7$  are not -H and -OH or when taken together are not

R\* is H, COOR<sup>9</sup>, CONHR<sup>10</sup>, CSNHR<sup>11</sup>, COR<sup>12</sup>, SO<sub>2</sub>R<sup>13</sup>, lower alkyl, aryl lower alkyl, heteroaryl, or heteroaryl lower alkyl, wherein aryl is optionally substituted with 1-3 substituents selected from lower alkyl, lower alkoxy, halo, CN, NH<sub>2</sub>, COOH, CONH<sub>2</sub>, carboalkoxy, and mono- or di-lower alkylamino and wherein heteroaryl is a mono- or

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- bicyclic heteroaromatic ring system of 5 to 10 members including 1 to 3 heteroatoms selected from O, N, and S and 0-3 substituents selected from halo, amino, cyano, lower alkyl, carboalkoxy, CONH<sub>2</sub>, and S-lower alkyl;
- R<sup>9</sup> is lower alkyl, aryl, aryl lower alkyl, heteroaryl, aryl substituted by 1-3 substituents selected from alkyl, alkenyl, alkoxy, methylene dioxy, and halo, or a 5- to 6-membered heterocyclic ring wherein the hetero atom is O or N, wherein heteroaryl is a heteroaromatic ring of 5 to 6 members including 1 to 2 heteroatoms selected from O, N, and S and 0-2 substituents selected from lower alkyl, dialkylamino, lower alkoxy, and halo,
- R<sup>10</sup> and R<sup>11</sup> are each independently lower alkyl, aryl lower alkyl, or aryl substituted by 1-3 substituents selected from lower alkyl, halo, alkoxy and haloalkyl;
- R<sup>12</sup> is lower alkyl, aryl, heteroaryl, aryl lower alkyl, heteroaryl lower alkyl, a 5- or 6-membered heterocyclic ring containing 1-2 heteroatoms selected from O, S, and N, a 5- or 6-membered heterocyclic ring containing 1-2 heteroatoms selected from O, S and lower alkyl, or aryl substituted with 1-3 substituents selected from lower alkyl, alkoxy, halo, sulfamoyl, lower alkyl sulfamoyl, qyano, and phenyl;
- R<sup>11</sup> is lower alkyl, aryl, or aryl substituted with 1-3 substituents selected from lower alkyl, alkoxy, halo, CN, and haloalkyl;
- R<sup>14</sup> is H; [ alkyl ]; alkyl substituted by 1-3/alkoxy, [ S-, loweralkyl ] <u>S-loweralkyl</u>, sulfamoyl, halo, alkylsulphonamido, or arylsulphonamido; alkenyl; alkynyl; aryl; substituted aryl; heteroaryl; substituted heteroaryl; heterocycloalkyl; -CH<sub>2</sub>NR<sup>16</sup>C(O)R<sup>16</sup>;-C(O)NR<sup>16</sup>R<sup>16</sup>; -CH<sub>2</sub>OC(O)R<sup>16</sup>; or -CH<sub>2</sub>SC(O)R<sup>16</sup>;
- $R^{15}$  is H, alkyl, -C(O)X, -C(S)X, or  $/C(NCN)NR^3R^3$ ;
- R<sup>16</sup> is lower alkyl, substituted lower alkyl, aryl, or substituted aryl;
- R<sup>17</sup> is H; [alkyl; ] alkyl substituted by 1-3 alkoxy, [S-, loweralkyl | <u>S-loweralkyl</u>, sulfamoyl, halo, alkylsulphonamido, or arylsulphonamido; alkenyl; alkynyl; aryl, substituted aryl,



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heteroaryl; substituted heteroaryl; heterocycloalkyl; | heterocycloalkyl; diphenylmethyl; |  $-CH_2NR^{16}C(O)R^{16}; \ -C(O)NR^{16}R^{16}; \ -CH_2OC(O)R^{16}; \ \text{or} \ -CH_2SC(O)R^{16};$ 

[  $R^{18}$  is H or -( $CH_2$ )<sub>0.5</sub> $R^{17}$  ];

X is alkyl, aryl, arylalkyl, O-loweralkyl, or -NR<sup>3</sup>R<sup>3</sup>;

-(CH<sub>2</sub>)<sub>1-6</sub>-, optionally substituted with 1-3 lower alkyl; -CHR<sup>2</sup>-; -Phe-CH<sub>2</sub>-, where Phe is Z is optionally mono-substituted with halogen, lower alkyl, or alkoxy, or heteroarylene-(CH<sub>2</sub>)-;

m is 2 or 3;

n is 4-9;

or a pharmaceutically acceptable salt thereof.

7. (once amended) A compound of claim 4 wherein:

is OH, OCH<sub>2</sub>C(O)NH(CH<sub>2</sub>)<sub>1-6</sub>R<sup>17</sup>, or OCH<sub>2</sub>-4-Phe-C(O)NH(CH<sub>2</sub>)<sub>1-6</sub>R<sup>17</sup>;  $\mathbb{R}^1$ 

 $IR^2$ is H or lower alkyl;

 $R^{-1}$  and  $R^{5}$  are each lower alkyl | or  $-(CH_2)_{1-4} - N$ 

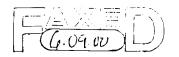
 $R^4$  and  $R^5$  taken together are -(CH<sub>2</sub>)<sub>5</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-O-(CH<sub>2</sub>)<sub>2</sub>-,  $-(CH_2)_2-NR^8-(CH_2)_2-$ ,  $-(CH_2)_2-CH(NHR^6)(CH_2)_2-$ ,  $-(CH_2)_2-S-(CH_2)_2-$ ,  $-(CH_2)_2$ or  $CH_2CH(NCH_3)(CH_2)_2CHCH_2^-$ ;

 $R^{6}/R^{7}$  are H/OH; -O, or  $-S(CH_{2})_{2}$ \$-;

 $R^H$ is H, COOR9, CONHR10/CSNHR11, COR12, SO2R13, lower alkyl, aryl lower alkyl, heteroaryl wherein the ring members include 1 to 3 N atoms and the substituents are halo or amino, heteroaryl lower alkyl wherein heteroaryl is 6-membered and the heteroatoms are N, or aryl lower alkyl substituted with 1 substituent selected from lower alkyl, alkoxy, and halo;

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R° is lower alkyl, aryl lower alkyl, aryl, tetrahydrofuranyl, tetrahydropyranyl, or aryl substituted by 1 to 2 substituents selected from lower alkyl, alkenyl, alkoxy, methylene dioxy, and halo;

 $R^{10}$  and  $R^{11}$  are each independently aryl, aryl lower alkyl, or aryl substituted by 1 substituent selected from lower alkyl, halo, alkoxy, trifluoromethyl, and pentafluoroethyl;

R<sup>12</sup> is lower alkyl, aryl lower alkyl, heteroaryl lower alkyl wherein the heteroatoms are N, a 5- or 6-membered heterocyclic ring containing 1-2 heteroatoms selected from S and N lower alkyl, or aryl substituted with 1 substituent selected from lower alkyl, alkoxy, halo, sulfamoyl, cyano, or phenyl;

R<sup>13</sup> is lower alkyl, aryl, or aryl substituted with I substituent selected from lower alkyl, alkoxy, and halo;

or a pharmaceutically acceptable salt thereof.

10. (once amended) A compound of claim of the formula:

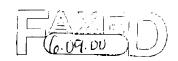
$$R^{1}$$
 $R^{2}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 

wherein:

R¹ is  $\begin{bmatrix} 6-\text{or } 7-\text{OCH}_2\text{C(O)NHCHR}^{18}(\text{CH}_2)_{0-5}\text{R}^{17}, 6-\text{or } 7-\text{OCH}_2-4-\text{Phe-C(O)NHCHR}_{18}(\text{CH}_2)_{0-5}\text{R}^{17} \end{bmatrix}$  $\frac{6-\text{ or } 7-\text{OCH}_2\text{C(O)NH(CH}_2)_{1-6}\text{R}^{17} \text{ or } 6-\text{ or } 7-\text{OCH}_2-4-\text{Phe-C(O)NH(CH}_2)_{1-6}\text{R}^{17}}{\text{when } R_2 \text{ is } H,}$ 

R<sup>1</sup> is  $[7\text{-OCH}_2\text{C}(O)\text{NHCHR}^{18}(\text{CH}_2)_{0.5}\text{R}^{17}, \text{ or } 7\text{-OCH}_2\text{-4-Phe-C}(O)\text{NHCHR}_{18}(\text{CH}_2)_{0.5}\text{R}^{17}]$  $\frac{7\text{-OCH}_2\text{C}(O)\text{NH}(\text{CH}_2)_{1.6}\text{R}^{17} \text{ or } 7\text{-OCH}_2\text{-4-Phe-C}(O)\text{NH}(\text{CH}_2)_{1.6}\text{R}^{17}}{\text{when } \text{R}^2 \text{ is } \text{CH}_3;}$ 

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 $R^4 \text{ and } R^5 \text{ are each methyl; or } R^4 \text{ and } R^5 \text{ taken together are -}(CH_2)_5\text{--}, -(CH_2)_2\text{--}O\text{--}(CH_2)_2\text{--}, \\ -(CH_2)_2\text{--}NR^8\text{--}(CH_2)_2\text{--}, -(CH_2)_2\text{--}CH(NHR^8)(CH_2)_2\text{--}, -(CH_2)_2\text{--}S\text{--}(CH_2)_2\text{--}, or \\ -CH_2CH(NCH_3)(CH_2)_2CHCH_2\text{--}; or } R^4 \text{ is methyl and } R^5 \text{ is -}CH_2OCH_3 \text{ or -}(CH_2)_3N(Et)_2, \\ -(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2, \\ -(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2, \\ -(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2, \\ -(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2, \\ -(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2, \\ -(CH_2)_3N(Et)_2\text{--}(CH_2)_3N(Et)_2, \\ -(CH_2)_3N(Et)_2, \\ -(CH_2)_2, \\ -(CH_2$ 

one of R<sup>6</sup> and R<sup>7</sup> is H and the other is OH; or R<sup>6</sup> and R<sup>7</sup> taken together are =O or -S(CH<sub>2</sub>)<sub>2</sub>S-; or one of R<sup>6</sup> and R<sup>7</sup> is H and the other is NAB, where A is methyl, 2-methoxyethyl, 2-phenylethyl, 4-methoxybenzyl, 2-tetrahydro-furanylmethyl, 2-(3,4-dimethoxyphenyl)ethyl, or 2,2-diphenylethyl and

B is

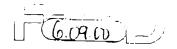
R\* is II, CONHCH<sub>3</sub>, SO<sub>2</sub>Phe, (CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>, CO(CH<sub>2</sub>)<sub>2</sub>CH<sub>3</sub>, benzyl, C(O)-(4-Phe)-SO<sub>2</sub>NH<sub>2</sub>, or  $\stackrel{N}{=}$ 

 $(CH_2)_{1:6}R^{14}$  is methyl, n-butyl, 3-methoxy-n-propyl,  $CH_2$ -c-propyl,or - $(CH_2)_{1:3}$ -phenyl, and  $(CH_2)_{1:6}R^{17}$  is methyl, 2-methoxyethyl, 2-phenylethyl, 4-methoxybenzyl,

methyl-2-tetrahydrofuranyl, 2-(3,4-dimethoxyphenyl)ethyl, or 2,2-diphenylethyl; or a pharmaceutically acceptable salt thereof.

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## 11. A compound of claim 4 of the formula IIb, IId, or IId:

wherein

R<sup>1</sup> is 6- or 7-OH, [6- or 7-OCH<sub>2</sub>C(O)NHCHR<sup>18</sup>(CH<sub>2</sub>)<sub>0-5</sub>R<sup>17</sup>, or 6- or 7-OCH<sub>2</sub>-4-Phe-C(O)NHCHR<sup>18</sup>(CH<sub>2</sub>)<sub>0-5</sub>R<sup>17</sup> ] 6- or 7-OCH<sub>3</sub>C(O)NH(CH<sub>2</sub>)<sub>1-6</sub>R<sup>17</sup> or

6- or 7-OCH2-4-Phe-C(O)NH(CH)1-6R17;

R<sup>2</sup> is H or CH<sub>3</sub>;

 $R^*$  is  $-CO-Phe-p-SO_2NH_2$ ; and

 $R^{\circ}$  and  $R^{7}$  together are =0 or -SCH<sub>2</sub>CH<sub>2</sub>S-

Claim 14, delete first table entry wherein:

 $R^1$  is  $R^2$  is  $R^4/R^5$  is

 $R^6$  is  $R^7$  is  $R^8$  is

6-OH	Н	$-(CH_2)_2NR^*(CH_2)_2$	ОН	<b>I</b> -ī	-CONH-Ph-4-CF <sub>1</sub>